

Spark Gap

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Mid-State Amateur
Radio Club*



Mid-State Amateur
Radio Club
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ARRL Cites “Additional Authorities” to Buttress BPL Reconsideration Petition

NEWINGTON, CT, Jul 12, 2005—The ARRL has cited the conclusions of a UK study and of the FCC itself to further support its call for the Commission to “reconsider, rescind and re-study” the broadband over power line (BPL) rules it adopted last October. In its

Petition for Reconsideration last February in the BPL proceeding, ET Docket 04-37, the League argued that in permitting unlicensed Part 15 devices such as BPL, the Commission’s main obligation is to establish a radiated emission level low enough so that the devices “will predictably not interfere” with licensed services.

“Unless this conclusion can be fairly reached, the Commission has no statutory authority to permit the facilities to operate on an unlicensed basis,” the League maintains in a *Citation of Additional Authority (Citation)* filed July 8. Furthermore, the League says, the FCC itself affirmed the ARRL’s argument in another proceeding.

The League cited a Commission conclusion in last December’s *Second Report and Order* and *Second Memorandum Opinion and Order* in the Ultra-Wideband (UWB) proceeding, ET Docket 98-153. The FCC held in its UWB *Order* that a reasonable reading of Section 301 of the Communications Act would limit licensing to “any apparatus which transmits enough energy to have a significant potential for causing harmful interference.” The FCC, the League asserts in its *Citation*, cannot authorize BPL—although it’s an unintentional radiator—due to “acknowledged (and field-proven) substantial interference potential to licensed services.” The solution, the ARRL said, is to establish radiated emission limits at a level that would make the chances of interference negligible. Accompanying the *Citation* are studies of BPL systems in Scotland conducted by Ofcom, the UK’s telecommunications regulator. These include “*Amperion PLT Measurements in Crieff*,” “*Ascom PLT Measurements in Winchester*,” and “*DS2 PLT Measurements in Crieff*.”

Ofcom says concern over signal leakage is one reason for BPL’s small UK market share compared with DSL and cable. “Although efficient for their primary purpose, electricity supply cables are not designed, screened or balanced for high frequency use, and in this application they produce significant leakage emissions,” the Ofcom study said, adding that the emissions potentially can interfere with radio communication services “including short wave broadcasts.”

In its *Citation*, the ARRL again argues that the FCC “incorrectly rejected” the League’s recommendation for a 20 dB extrapolation factor in measuring BPL signal decay on HF based on distance from the signal’s source. Instead, the FCC

opted to apply the existing—and less stringent—40 dB/decade factor in Part 15.

“The existing Part 15 standard is clearly inapplicable and underestimates the BPL field strength by up to 11.5 dB,” the ARRL said, pointing to the Ofcom studies to support its assertion. “The conclusions of these studies,” the League noted, “are that 20 dB/decade is appropriate for

determining signal decay with distance from the source of the BPL signal, and that the FCC’s adopted 40 dB/decade factor is inappropriate.” The League further noted that the FCC itself applies a 20 dB/decade standard to measure signal decay of Part 18 Industrial, Scientific and Medical devices that can operate below 30 MHz. “It is apparent, therefore, that in comparable circumstances, the 20 dB/decade attenuation factor should be applied to BPL systems as a means of determining actual field strength of BPL signals.” The League’s *Citation* further supports arguments made in the ARRL’s *Reply to Oppositions to Petition for Reconsideration* last April. Several BPL manufacturers or proponents have argued in the proceeding that the FCC should neither reconsider nor modify the 40 dB/decade distance extrapolation factor when making power measurements of BPL systems.

“UK Study on BPL”

Spectrum Protection Bill Sponsor's Article Promotes Amateur Radio's Value

NEWINGTON, CT, July 13, 2005—In an article in *The Hill*—a magazine for and about Congress—Amateur Radio Spectrum Protection Act of 2005

sponsor Sen Michael Crapo (R-ID) promotes the value of Amateur Radio and his bill's efforts to preserve spectrum for the service. In June, Crapo introduced the US Senate version of the Amateur Radio Spectrum Protection Act of 2005, S 1236, with bipartisan support in the 109th Congress. Its wording is identical to the House version, HR 691, introduced earlier in the session by Rep Michael Bilirakis of Florida. In his article, "Amateur Radio: a voice in the

storm," Crapo says that in an era of increasing demand for spectrum, Amateur Radio's allocations must be preserved.

"Today, Amateur Radio still serves a vital purpose, especially in our post-Sept. 11 world," he wrote. "Acting as volunteers, Amateur Radio operators provide assistance in numerous disaster-relief efforts, from the terror attacks in New York and Washington to floods in Texas, hurricanes in Florida, earthquakes in Seattle and California and fires in the West and in my home state of Idaho."

In his article, Crapo points out that since 1982, Amateur Radio has lost 107 megahertz—"the equivalent of 18 television channels"—and another 145 megahertz "is in danger of being reallocated." Calling Amateur Radio "one of the pioneers of modern communications," he notes that even today's communication systems, such as cellular telephones, can fail or may be primary targets, while ham radio operators have a demonstrated history of being able to provide vital communication under adverse circumstances.

"The Amateur Radio Spectrum Protection Act will ensure the success of this vital link in our security communications infrastructure while continuing to encourage the innovation and creativity that is the hallmark of this field," Crapo asserts. The Senate and House legislation would require the FCC to provide "equivalent replacement spectrum" to the Amateur Radio and Amateur-Satellite services in the event of reallocation to other services of primary amateur spectrum or the diminution of secondary amateur spectrum. The bill also would cover additional allocations within Amateur Radio bands that "would substantially reduce" their utility to Amateur Service licensees.

"It maintains spectrum allocation flexibility by only requiring that the basic amount of spectrum allocated to Amateur Radio operators be maintained," Crapo explained. "Together with my colleagues Sens Daniel Akaka (D-HI), Kit Bond (R-MO), Max Baucus (D-MT) and Conrad Burns (R-MT), I look forward to working toward this bipartisan solution to the problem of lost spectrum for Amateur Radio operators."

S 1236 has been referred to the US Senate Commerce, Science and Transportation Committee of which Burns is a member. HR 691 has been referred to the US House Committee on Energy and Commerce.

The Hill circulates to all members of Congress and their staff members as well as to much of "official Washington."

Efforts continue in both chambers of Congress to attract additional cosponsors for S 1236 and HR 691. The League encourages its members to urge their congressional representatives and senators to sign aboard. More than 100 lawmakers in both houses agreed to cosponsor similar legislation in the 108th Congress. A [sample letter](#) for HR 691 and a [sample letter](#) for S 1236—are available on the

ARRL Web site for members to use as guides in writing their members of Congress to seek their support. To expedite delivery, send all correspondence bound for Members of Congress—preferably as an attachment—to specbill@arrl.org or fax it to 703-684-7594. The ARRL will bundle correspondence addressed to each Member of

Congress for hand delivery.

For general guidance on the best methods of contacting your members of Congress, see "[Communicating with Congress](#)," by Derek Riker, KB3JLF, on the ARRL Web site.

Radio Spectrum Act

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WANTED

We need articles or article suggestions for the Spark Gap. Please send us your thoughts on amateur radio related topics or let us know what you want to see in your newsletter. Contact either Bob LaGrange, N9SIU, or Linda Harshbarger, KC9GCH.

President Bush Sends Greetings to Field Day 2005 Participants

From The ARRL Letter Vol. 24, No. 25 June 24, 2005

President George W. Bush has sent greetings from the White House to everyone participating in ARRL Field Day 2005.

"I send greetings to those celebrating the annual Field Day for Amateur Radio, hosted by the American Radio Relay League. Across our country, radio plays a vital role in relaying important information to the public and emergency service personnel in times of need," the president said.

"By providing emergency communications at the federal, state, and local level, licensed Amateur Radio operators help first responders and law enforcement officials save lives and make our country safer. Your efforts help ensure the right assistance gets to the right people at the right time. I appreciate all ham operators who give their time and energy to help make our citizens more secure. Your good work reflects the spirit of America and contributes to a culture of responsibility and citizenship that strengthens our nation. Laura and I send our best wishes."

An annual exercise aimed at developing skills to meet the challenges of emergency preparedness as well as to acquaint the general public with the capabilities of Amateur Radio, ARRL Field Day takes place this year on Saturday and Sunday, June 25-26. Stations throughout the Americas may participate.

Vanity call sign application fee to rise

From the ARRL Bulletin 16; July 11, 2005

The regulatory fee to apply for an Amateur Radio vanity call sign will go up slightly later this year, an FCC Order indicates. A Report and Order and Order On Reconsideration (R&O) in the assessment and collection of regulatory fees for fiscal years 2004 and 2005 released July 7 increases the fee for FY 2005 to \$21.90 for the 10-year license term. The FCC said it had adjusted FY 2004 "payment units" for each service to better reflect expected FY 2005 payment liabilities.

"We tied to obtain verification for these estimates from multiple sources and, in all cases, we compared FY 2005 estimates with actual FY 2004 payment units to ensure that our revised estimates were reasonable," the FCC said in the R&O.

"Where appropriate, we adjusted and/or rounded our final estimates to take into consideration the fact that certain variables that impact on the number of payment units cannot be estimated exactly."

In a Notice of Proposed Rulemaking (NPRM) in the proceeding last February, the Commission had proposed keeping the vanity call sign fee at its current \$20.80. The fee rose from \$16.30 to \$20.80 last August. A reevaluation in the number of anticipated vanity call sign applications—or "payment units"—accounts for the latest fee hike. The February 2004 NPRM had estimated the FCC would receive 8000 vanity applications during FY 2005. The July R&O reflects a downward recalculation to an anticipated 7600 vanity applications—up only slightly from a year earlier—so the fee had to be raised to meet FY 2005 revenue requirements of \$166,443.

The FCC hopes to collect a total of more than \$280 million in regulatory fees for fiscal year 2005, as mandated by Congress "to recover the regulatory costs associated with the Commission's enforcement, policy and rulemaking, user information, and international activities."

While the R&O does not specify the effective date of the change, this generally occurs 30 days after the R&O's publication in The Federal Register—which hasn't happened yet.

More information on vanity call signs is available on the ARRL Website, www.arrl.org/arrlvec/vanity.html.

FCC issued revised form 605

From the ARRL Bulletin 15; July 11, 2005

A revised FCC Form 605, "Quick-Form Application for Authorization in the Ship, Aircraft, Amateur, Restricted and Commercial Operator, and General Mobile Radio Services," has gone into effect. The new form is available on the FCC Web site at, <http://www.fcc.gov/Forms/Form605/605.html>. The new form must be used for all receipts as of July 18.

The revised form includes a new Question 13 (subsequent questions have been appropriately renumbered) that will affect amateurs applying for Not answering the question could result in dismissal of an application.

Starting with receipts of Monday, July 18, the FCC's Wireless Telecommunications Bureau no longer will accept an FCC Form 605 bearing an edition date prior to July 2005. Applicants can avoid filing outdated editions by submitting applications electronically via the Universal Licensing System (ULS). This change will not affect usage of NCVEC Form 605, that VECs and VE teams use.

For additional information or assistance, visit the FCC Help and Support Web page at, <http://esupport.fcc.gov/index.htm>

WA9RDF
Repeater
146.835/
146.235 MHz
151.4 Hz PL
Tone

Weekly Net
Every Sunday
at 7PM EST

Tune in to hear
the ARRL
Newsline!

Weekly Net

Make sure to check out our weekly net, held every Sunday at 1900 (7 PM) local time. This is a great chance to meet other local amateur radio operators and test your operating skills. Newslines are often played, allowing net participants to get the latest news about the amateur radio hobby. For those without the license or means to check in over the air, we offer an email check-in. Just send an email with your name and contact information to netcontrol@midstatehams.org, and we will record your check-in!



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2005 Schedule of Events

Public Service Events and/or Educational/Testing Opportunities

JULY

16 **MARC Meeting**

Johnson County Emergency Management Agency, 1111 Hospital Road, Franklin, IN

30 **Sprint Triathlon, Eagle Creek**

Contact Mike Palmer, N9FEB, for information
Indianapolis, IN

AUGUST

6 **Broad Ripple Hamfest**

7373 Westfield Blvd., Indianapolis, IN

8 **Greentown Hamfest**

Greentown Lions Club Fairgrounds, Greentown, IN

15 **Lafayette Hamfest**

Tippecanoe County Fairgrounds, Lafayette, IN

20 **MARC Meeting**

Johnson County Emergency Management Agency, 1111 Hospital Road, Franklin, IN

20 **Sprint Triathlon, Eagle Creek**

Contact Mike Palmer, N9FEB, for information
Indianapolis, IN

SEPTEMBER

17 **MARC Meeting/Picnic**

Location to be announced

25 **Greenfield Hamfest**

Hancock County 4H Fairgrounds, Greenfield, IN

Note: For most Indianapolis events, contact Mike Palmer, N9FEB, to volunteer or for more information check out website www.indyhams.org.

Mid-State Amateur Radio Club

The Mid-State Amateur Radio Club meets the **THIRD SATURDAY** of each month in the basement of the Johnson County Emergency Management Agency, 1111 Hospital Road, Franklin, Indiana 46131. See our website, www.midstatehams.org, for maps on how to get to our meeting.